

CLAIM SET AS AMENDED

1. (currently amended) A method ~~Method~~ for correcting speed feedback in a synchronous permanent-magnet motor, ~~characterized in that~~ the steps comprising:

measuring a speed value of the synchronous permanent-magnet motor by a feedback sensor;

calculating the averages of a speed reference and a speed measurement for both downward and upward constant-speed travel; are calculated, whereupon

identifying the gain and zero factors; and are identified and the

correcting the measured speed measurement value to compensate for drift in the feedback sensor is corrected to the correct value.

2. (currently amended) The method ~~Method~~ according to claim 1, ~~characterized in that wherein~~ the above-mentioned averages of speed reference and speed measurement are calculated using the a sum of the speed values speeds and a total the number of samples of the speed values.

3. (currently amended) The method ~~Method~~ according to claim 2, ~~characterized in that wherein a new the~~ speed gain factor and speed

zero factor are identified each time the averages of speed reference and speed measurement are calculated.

4. (currently amended) The method ~~Method~~ according to claim 3, ~~characterized in that wherein~~ the ~~aforsaid~~ speed gain factor ~~factors~~ and speed zero factor ~~factors~~ are updated by a forgetting factor.

5. (currently amended) The method ~~Method~~ according to claim 3, ~~characterized in that wherein~~ the ~~aforsaid~~ speed gain factor ~~factors~~ and speed zero factor ~~factors~~ are updated by an exponential forgetting factor.

6. (currently amended) The method ~~Method~~ according to claim 4, ~~characterized in that wherein~~, by applying the ~~aforsaid~~ forgetting factor, measurement samples of recent history are weighted greater than ~~given more weight as compared with~~ earlier ~~later~~ measurement samples.

7. (currently amended) The method ~~Method~~ according to claim 1, ~~characterized in that wherein~~ the method is adaptive.

8. (currently amended) The method ~~Method~~ according to claim 1, ~~characterized in that wherein~~ the synchronous permanent-magnet

motor ~~of the method~~ is ~~used as~~ an elevator drive machine.

9. (new) An apparatus for correcting measured speed feedback, the apparatus comprising:

a measuring unit for measuring a speed value of a synchronous permanent-magnet motor;

a calculating unit for calculating averages of a speed reference and a speed measurement from the measured speed value;

an identifying unit for identifying a gain factor and a zero factor; and

a correcting unit for compensating a drift in the measuring unit, the correcting unit compensating for the drift on the basis of the average of the speed reference, the average of the speed measurement, the identified gain factor, the identified zero factor, and on the basis of a forgetting factor.

AMENDMENTS TO THE DRAWINGS

Attached hereto is one (1) formal drawing that complies with the provisions of 37 C.F.R. § 1.81. The formal drawing illustrates Figs. 1 and 2.

It is respectfully requested that the formal drawing be approved and made a part of the record of the above-identified application.